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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,708	10/02/2003	Jerry H. Stoller	SLRE.103540	9195
7590 09/27/2005			EXAMINER	
Walter R. Brookhart Shook, Hardy & Bacon LLP Suite 1600 600 Travis Houston, TX 77002			CLARDY, S	
			ART UNIT	PAPER NUMBER
			1617	
DATE MAILED: 09/27/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/677,708

Applicant(s)

STOLLER, JERRY H.

Examiner

S. Mark Clardy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Claims 1-70 are pending in this application.

Applicant's claims are drawn to:

1 a method of inhibiting disease on and in plant tissues by applying in concentrations below the amount effective for affecting plant growth:

- a a plant growth hormone¹, precursor, or conjugate (claims 25-27),
- b an auxin² (claims 1-24),
- c an auxin for control of Fusarium and Rhizoctonia (claims 28-32);

2 a method of inhibiting insect infestation on plants by applying in concentrations below the amount effective for affecting plant growth:

- a a plant growth hormone, precursor, or conjugate (claims 51-53),
- b an auxin (claims 33-50),
- c an auxin for control of thrips on onions (claims 54-59);

3 a seed or seed piece treated with an amount of a plant growth hormone, precursor, or conjugate (claims 68-70), or auxin (claims 60-67), wherein the amount is less than that required to affect plant growth.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

¹ Claim 25: auxins, ethylene, cytokinin, gibberellins, abscisic acid, brassinosteroids, jasmonates, salicylic acids

² Claim 4, 6 (auxins): IAA; IPA, IBA, phenylacetic acid, NAA, 2,4-D, 4-chloroindole-3-acetic acid, 2,4,5-T, 2-methyl-4-chlorophenoxyacetic acid, 2,3,6-TBA, 2,4,6-TBA, 4-amino-3,4,5-trichloropicolinic acid

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Claims 1-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Fredrick (US 4,675,327) OR Wei (Abstract of CN 1262037A).

Fredrick teaches antimicrobial embalming fluids comprising the synergistic combination of a disinfectant and a plant hormone or plant growth regulator (columns 2-3). The auxinic hormone NAA was tested in Example VI at a concentration of 1.0 mM resulting in a zone of inhibition of 10.0 mm, thus indicating that the antimicrobial property of NAA was known.

Wei teaches that plant auxin was a known antibacterial and antiviral agent.

Thus it would have been *prima facie* obvious to the ordinary artisan at the time the invention was made to have used plant hormones such as auxins as antimicrobial agents because the prior art teaches that such activity was known for this class of agents. Since application for antimicrobial purposes was known, at concentrations below the plant hormone activity threshold, it would be apparent that other effects of such applications, including inhibition of insect infestation, would necessarily follow from such applications. Further, absent a showing of criticality, it would be obvious to apply the compositions to any plant or plant part, including seed.

No unobvious or unexpected results are noted; no claim is allowed.

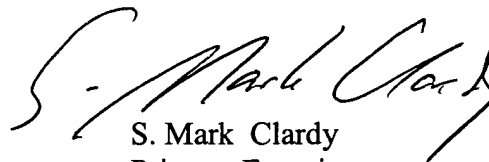
This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is 571-272-0611. The examiner can normally be reached on 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "S. Mark Clardy", with a stylized flourish at the end.

S. Mark Clardy
Primary Examiner
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September 23, 2005